

In this issue:

August 2019

- Extreme Excess Emission of Ionized Carbon Linked to Jet from Supermassive Black Hole
- Call for Proposals Deadline is September 6
- SOFIA Employment Opportunities
- Upcoming Tele-Talks

Extreme Excess Emission of Ionized Carbon linked to Jet from Supermassive Black Hole



The Close AGN Reference Survey (CARS). Discovery of a global [C II] 158 μm line excess in AGN HE 1353-1917 Smirnova Binchukova L et al. 2010, A&A 626, 131

Smirnova-Pinchukova, I., et al., 2019, A&A, 626, 131. <u>Read the paper here.</u>

Astronomers were quite surprised when they discovered that during the course of their survey of five active galactic nuclei, the galaxy with the smallest star formation rate had the brightest emission of a spectral line of ionized carbon – 10 times stronger than what was expected based on observations of similar galaxies. Detailed multi-wavelength analysis of the [CII] line at 158 μ m observed with FIFI-LS has revealed that a radio jet is launching a multi-phase outflow from the supermassive black hole at the center of the galaxy.

Read the science highlight summary here.



The deadline to submit proposals for Cycle 8 is fast upon us! Cycle 8 will offer a <u>normal Call for Proposals</u> and a separate call for <u>Legacy proposals</u> for projects spanning two years of observations and <u>Archival Research</u> <u>proposals</u> for research utilizing existing, <u>publicly available SOFIA data</u>.



Want to give your proposal an edge? The materials from the recent

Proposal Tools Webinar and associated video tutorials <u>are now available</u> to help you avoid the typical pitfalls in observing time estimates and enhance the Technical Feasibility section of your proposal. To further help increase the chances of your proposal's success, use the inverse targets of observation plots to <u>submit observing</u> requests for complementary sky positions. The plots display regions of the sky where further research is needed and are optimum for planning efficient observations with SOFIA's unique observing platform.

<u>Contact the Help-Desk</u> for additional support with submitting your proposal.

We're Hiring!

SOFIA has three to four postdoctoral positions available with funding (two-year term), with a possible third-year extension contingent on performance and funding. Post-docs will have the opportunity to work on topics such as the birth of stars and planets, origins of life, physics of the distant universe, and evolution of planetary systems. Funding is available for travel to conferences, visiting collaborators, equipment, and publications.

Read the complete position summary and apply here. More SOFIA openings can be found here.

Upcoming Tele-Talks

SOFIA Tele-Talks are scientific presentations given via phone, with slides distributed ahead of time. The talks are targeted broadly towards members of the astronomy

community who are interested in SOFIA science and in the current and potential scientific capabilities of the observatory. The talks are organized by Dan Lester (Univ. of Texas, Austin) and held approximately twice a month on Wednesdays at 9:00am Pacific, noon Eastern.

For information on how to participate in the Tele-Talks, please check the <u>SOFIA Tele-</u><u>Talk page.</u>

The next Tele-Talks are:

- September 4: Hal Yorke (Director of SOFIA SMO); SOMER and FMR project reviews
- September 18: Fabio Santos (MPIfA); FIR polarization in Rho Oph A
- October 2: Jeonghee Rho (SETI Institute); Olll and OI in CasA knots
- October 16: Bhaswati Mookerjea (TIFR); G287.84-0.82 globule with upGREAT and APEX
- November 6: Enrique Lopez-Rodriguez (SOFIA Science Center); FIR polarimetry of NGC1068
- November 20: Irina Smirnova-Pinchukova (MPIfA); [CII] in AGNs

The SOFIA Instrument Suite

The Stratospheric Observatory for Infrared Astronomy (SOFIA) features an airborne platform hosting the following instrument suite available for use by the community of astronomers worldwide:

EXES: Echelon-Cross- Echelle Spectrograph $(4.5 - 28.3 \ \mu m)$ **FIFI-LS:** Far Infrared Field-Imaging Line Spectrometer $(51 - 200 \ \mu m)$ **FORCAST:** Faint Object infraRed CAmera for the SOFIA Telescope $(5 - 40 \ \mu m)$ **FPI+:** Focal Plane Imager Plus $(0.36 - 1.1 \ \mu m)$ **GREAT:** German REceiver for Astronomy at Terahertz Frequencies $(0.490 - 4.747 \ THz)$ **HAWC+:** High-resolution Airborne Wideband Camera Plus $(50 - 240 \ \mu m)$ **HIRMES:** HIgh Resolution Mid-infrarEd Spectrometer $(25 - 122 \ \mu m)$ (under construction)

Editor: Randolf Klein Content: Raquel Destefano Design: Leslie Proudfit

Please feel free to direct questions and comments to the SOFIA Science Center Help-Desk: <u>sofia_help@sofia.usra.edu</u>.

